

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
27 October 2005 (27.10.2005)

PCT

(10) International Publication Number  
**WO 2005/101877 A1**

(51) International Patent Classification<sup>7</sup>: **H04Q 7/28**,  
H04L 1/18

(21) International Application Number:  
PCT/SE2004/000587

(22) International Filing Date: 15 April 2004 (15.04.2004)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (for all designated States except US): **TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)**  
[SE/SE]; S-164 83, Stockholm (SE).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **SÅGFORS, Mats**  
[FI/FI]; Ravalsvägen 8C 13, FIN-02400 Kyrkslätt (FI).

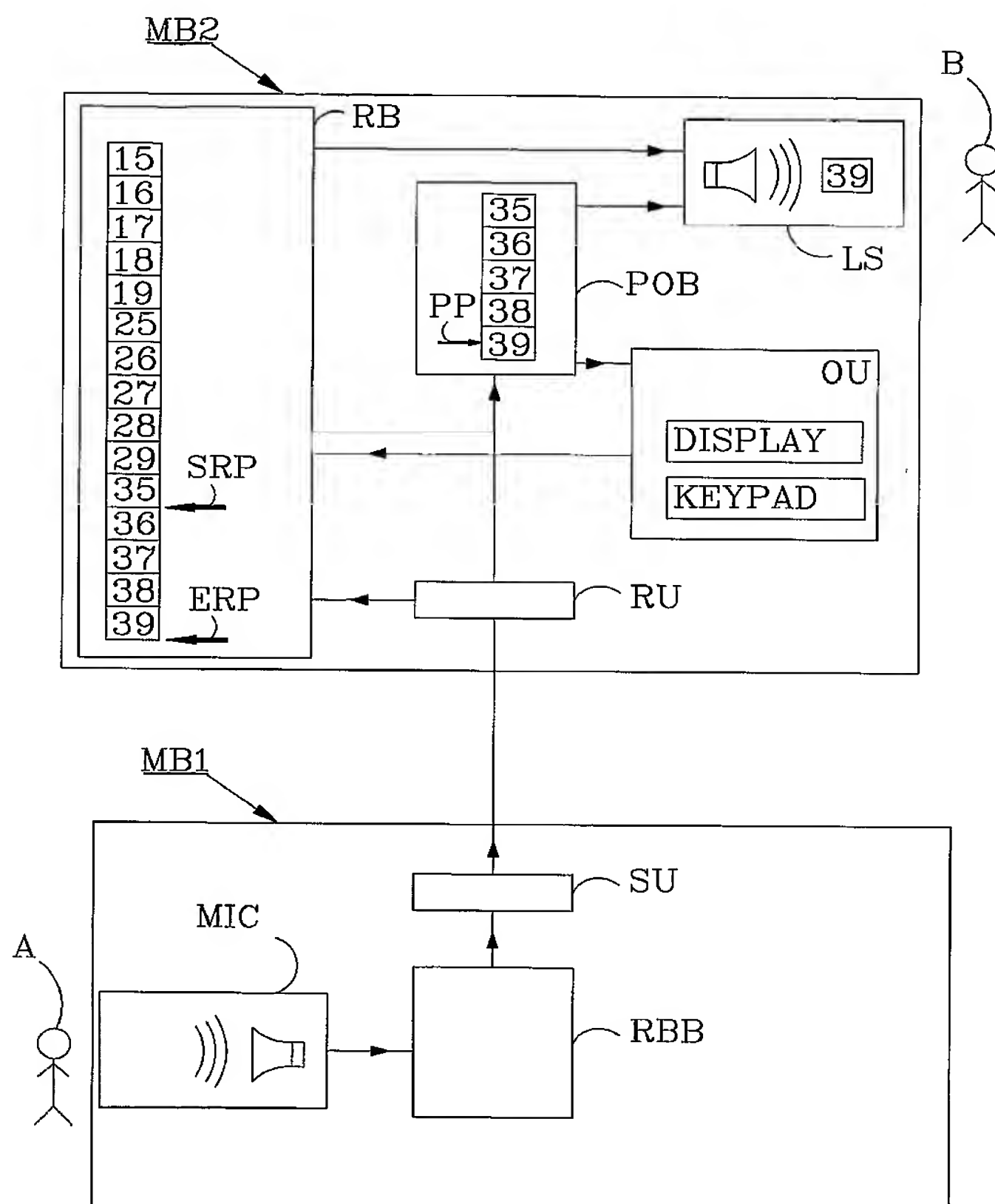
(74) Agent: **SVENSSON, Lena**; c/o Ericsson AB, Patent Unit  
Core Networks, Älvsjö, Box 1505, S-125 25, Älvsjö (SE).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: ENHANCED TRANSMISSION QUALITY IN PUSH-TO TALK SYSTEM



(57) Abstract: The present invention relates to methods and arrangements to enhance transmission quality in a Push-to-Talk system comprising a sending mobile unit MB1, and a receiving mobile unit MB2 used by a receiving subscriber B. The receiving unit MB2 comprises a Play-Out-Buffer POB and a Repeat Buffer RB, whereby a stream of sequences 15-19,25-29,35-39 is sent from the sending unit MB1 to the receiving unit MB2. The method comprises the following steps: - The incoming stream of sequences 15-19,25-29,35-39 is collected into the Repeat Buffer RB and into the Play-Out-Buffer POB. The Play-Out-Buffer has a storage size and a point for commencing play-out that provides low voice delay, and the Repeat Buffer has a storage size that provides high sound quality. - The incoming stream is played-out from the Play-Out-Buffer POB to the receiving subscriber B. - Replay is commenced of a defined part 36-39 of the sequences 15-19,25-29,35-39 collected in the Repeat Buffer RB.



**Published:**

— *with international search report*

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*